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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,053

10/30/2003

Toshifumi Tsuruta

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26021 7590 10/11/2007

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EXAMINER

STULTZ, JESSICA T

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

10/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/698,053

Applicant(s)

TSURUTA ET AL.

Examiner

Jessica T. Stultz

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-5, 11-18, 24-27 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10, 19-23 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1203</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

Applicant's election of Group II, claims 6-10, 19-23, and 28 in the reply filed on July 20, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1-5, 11-18, 24-27 and 29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Groups I and III, there being no allowable generic or linking claim.

***Claim Objections***

Claims 10, 19, 23, and 28 are objected to because of the following informalities: claims 10 and 23, the phrase "the ring-shaped drive magnet" should be "the drive magnet" since there is no mention of the magnet being ring-shaped in dependent claims 6 and 19; claims 19 and 28, the phrase "equipment with camera" should be "equipment with a camera". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-10, 19-23, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Sekine et al US 5,572,372, herein referred to as Sekine et al '372.

Regarding claim 6, Sekine et al '372 discloses a lens driving device (Column 5, lines 22-24, wherein the lens driving unit is shown in Figure 9A) comprising: a moving body having a lens and a drive magnet that is moveable with the lens in an optical axis direction of the lens (Column 5, lines 25-60, wherein the moving body "43" holds lens "31" and comprises drive magnet "51", wherein the lens is movable along the optical axis, Figure 9A); and a fixed body that moveably supports the moving body in the optical axis direction (Column 5, lines 25-60, wherein the fixed body is "42", Figure 9A), the fixed body including a first drive coil and a second drive coil that are disposed in the optical axis direction and form magnetic circuits with the drive magnet (Column 5, lines 25-60, wherein the coils are "46" and "47", Figure 9A), and a first magnetic member and a second magnetic member that are disposed opposite the first drive coil and the second drive coil, respectively (Column 5, lines 25-60, wherein the magnetic members are terminals "49" and "50" which supply a voltage to activate the magnetic circuit of coils "46" and "47", Figure 9A), wherein the moving body is retained at a first specified position by magnetic attraction working between the drive magnet and the first magnetic member when energization of the first drive coil is stopped (Column 5, lines 45-60).

Regarding claim 19, Sekine et al '372 discloses portable equipment with a camera comprising a camera unit (Column 1, lines 10-15 and Column 5, lines 22-24); and a lens driving device mounted on the camera unit (Column 5, lines 22-24, wherein the lens driving unit is shown in Figure 9A), wherein the lens driving device comprises a moving body having a lens and a drive magnet that is moveable with the lens in an optical axis direction of the lens (Column 5, lines 25-60, wherein the moving body "43" holds lens "31" and comprises drive magnet "51", wherein the lens is movable along the optical axis, Figure 9A); and a fixed body that moveably

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supports the moving body in the optical axis direction (Column 5, lines 25-60, wherein the fixed body is "42", Figure 9A), the fixed body including a first drive coil and a second drive coil that are disposed in the optical axis direction and form magnetic circuits with the drive magnet (Column 5, lines 25-60, wherein the coils are "46" and "47", Figure 9A), and a first magnetic member and a second magnetic member that are disposed opposite the first drive coil and the second drive coil, respectively (Column 5, lines 25-60, wherein the magnetic members are terminals "49" and "50" which supply a voltage to activate the magnetic circuit of coils "46" and "47", Figure 9A), wherein the moving body is retained at a first specified position by magnetic attraction working between the drive magnet and the first magnetic member when energization of the first drive coil is stopped (Column 5, lines 45-60).

Regarding claims 7-8 and 20-21, Sekine et al '372 further discloses that the moving body is retained at a second specified position by magnetic attraction working between the drive magnet and the second magnetic member when energization of the second drive coil is stopped and wherein body is moved between the first drive coil and the second drive coil through energization of at least one of the first drive coil and the second drive coil (Column 5, lines 45-60).

Regarding claims 9 and 22, Sekine et al '372 further discloses that the drive magnet is disposed between the first drive coil and the second drive coil (Shown in Figure 9A, wherein at least a portion of magnet "51" is between coils "46" and "47").

Regarding claims 10 and 23, Sekine et al '372 further discloses that the moving body includes a cylindrical lens barrel (Column 5, lines 25-60, wherein the movable body "43" is a cylindrical lens barrel, Figures 9A-9B) that retains the lens, and the drive magnet is affixed in

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one piece to an outer circumference of the lens barrel (Column 5, lines 25-60, wherein the lens barrel "43" retains lens "31" and wherein magnet "51" is integral with the lens barrel on the outer surface thereof, Figures 9A-9B).

Regarding claim 28, Sekine et al '372 discloses a portable equipment with a camera (Column 1, lines 10-15 and Column 5, lines 22-24); comprising: a lens driving device defining an object lens side and an inner side opposite the object lens side (Column 5, lines 22-24, wherein the lens driving unit is shown in Figure 9A), the lens driving device comprising a moving body having a lens and a drive magnet that is moveable with the lens in an optical axis direction of the lens (Column 5, lines 25-60, wherein the moving body "43" holds lens "31" and comprises drive magnet "51", wherein the lens is movable along the optical axis, Figure 9A), and a fixed body that moveably supports the moving body in the optical axis direction (Column 5, lines 25-60, wherein the fixed body is "42", Figure 9A), the fixed body including a first drive coil and a second drive coil that are disposed in the optical axis direction and form magnetic circuits with the drive magnet (Column 5, lines 25-60, wherein the coils are "46" and "47", Figure 9A), and a first magnetic member and a second magnetic member that are disposed opposite the first drive coil and the second drive coil, respectively (Column 5, lines 25-60, wherein the magnetic members are terminals "49" and "50" which supply a voltage to activate the magnetic circuit of coils "46" and "47", Figure 9A), wherein the moving body is retained at a first specified position by magnetic attraction working between the drive magnet and the first magnetic member when energization of the first drive coil is stopped (Column 5, lines 45-60); a cover disposed on the object lens side of the lens driving device, and having an outer surface that is exposed, wherein the cover transmits light from outside and seals an interior of the lens

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driving device (Column 8, lines 37-63, wherein the cover comprises first lens "100a", Figure 18); an image pickup element that is disposed on an opposite side of the cover in the optical axis direction with the lens of the lens driving device interposed in between (Column 8, lines 37-52; wherein the image pickup element is a CCD, Figures 12-14); and a circuit substrate that is connected to the image pickup element, wherein the circuit substrate is disposed in the rear of the lens driving device within a diameter of the lens driving device (Column 9, line 46-Column 10, line 24, wherein the circuit elements comprises strain gauges "141-148" which are held on lens barrel "102" and connect to circuit elements "120-124", Figure 18).

### ***Conclusion***

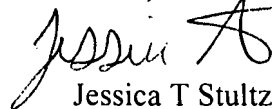
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaneda et al US 5,828,503 is cited as having some similar structure to the claimed invention for disclosing a lens driving unit comprising two driving coils and a drive magnet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T. Stultz whose telephone number is (571) 272-2339. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jessica T Stultz

Examiner

Art Unit 2873

September 30, 2007



**Application Number**  
10/698.053

TSURUTA, et al.

Group Art Unit	
<del>Not Assigned</del>	2873

[illegible]

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
/JS/	04-222444	08/12/92	JAPAN			Abstract	
	10-150759	06/02/98	JAPAN			Abstract	
	2000-187862	07/04/00	JAPAN			Abstract	
/JS/	2001-091981	04/06/01	JAPAN			Abstract	

DATE CONSIDERED 09/28/2007

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**Notice of References Cited**Application/Control No.  
10/698,053Applicant(s)/Patent Under  
Reexamination  
TSURUTA ET AL.Examiner  
Jessica T. StultzArt Unit  
2873

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**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,572,372	11-1996	Sekine et al.	359/824
*	B	US-5,828,503	10-1998	Kaneda et al.	359/824
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
	Q					
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	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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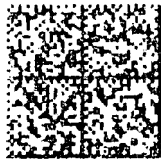
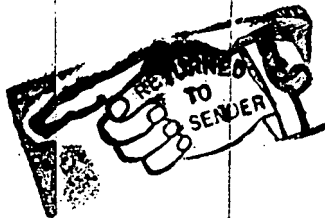
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